STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Edmund G. Brown, Jr., *Governor*

April 19, 2011

Mr. Glen Carter
Director, Gas Engineering
375 North Wiget Lane
Walnut Creek, CA 94598

File #: GA2010-22

SUBJECT: GO112E Gas Audit of PG&E's Mission Division

Dear Mr. Carter:

On behalf of the California Public Utilities Commission, Utilities Safety and Reliability Branch, Kenneth How and I conducted a General Order 112E audit of Pacific Gas & Electric's Mission Division from December 6-10, 2010.

The audit included review of the records for the years 2008 and 2009, and field inspections in the cities of Hayward, Fremont and Union City. A Summary of Inspection Findings is included with this letter.

Within 30 days of your receipt of this letter, please provide a written response indicating measures taken by PG&E to address the violations and issues/concerns noted.

If you have any questions, you may contact me at (415) 703-1817.

Sincerely,

Paul Penney

Paul Penney, PE
Utilities Engineer
Utilities Safety and Reliability Branch
Consumer Protection and Safety Division

Enclosure: Summary of Inspection Findings
- A. PG&E Internal Audit Findings
- B. CPUC Audit Findings/Violations
- C. Field Review

cc: Kenneth How, CPSD/USRB
Dennis Lee, CPSD/USRB
Larry Berg, PG&E Quality Assurance

SUMMARY OF INSPECTION FINDINGS

A. PG&E Internal Audit Findings

Prior to start of the audit, PG&E provided its findings of the internal audit it conducted of the Mission Division, dated August 27, 2010. Many of PG&E's internal audit findings are violations of PG&E's own standards, and are therefore violations of Title 49 CFR §192.13(c). Other issues found are violations of Title 49 CFR 192 as shown in Table 1.

We note that several of PG&E's findings have already been corrected, while the remaining findings will be addressed during their next scheduled maintenance (i.e., annual leak surveys, key valve maintenance). Please provide updates on items that were still pending corrective actions as of the last day of our audit. Also, we have follow up questions/requests related to a number of internal audit findings. Those follow up questions/requests are listed below Table 1.

Table 1: Mission Division Pre-CPUC Audit Internal Review Summary.

Item	Title 49 CFR Part 192	Topic/ (Finding)	# of Violations	# of Violations Corrected	# of Pending Corrections (as of 12/10/2010)
1	192.723(b)(1) and 192.723(b)(2)	Leak Survey – Distribution (**1, 4**)	127	127	0
2	192.13(c)	Leak Survey – Distribution (**2, 3, 5-9**)	2037	1307	730
3	192.13(c) and 192.706	Leak Survey – Transmission (**1-5**)	257	254	3
4	192.13(c) and 192.703(c)	Leak Repair (**I.1-I.9, II.1-II.5**)	451	451	0
5	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Bimonthly (**1.a-1.f**)	94	94	0
6	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Bimonthly (**1.g**)	?	All	0
7	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Rectifier Maintenance (**2**)	280	280	0
8	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Casings (**3**)	6	6	0
9	192.13(c)	Corrosion Control – 2008 Calibrations (**4**)	4	N/A	N/A
10	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Bimonthly (**5.a-5.d**)	4	4	0

Table 1: continued

Item	Title 49 CFR Part 192	Topic/ (Finding)	# of Violations	# of Violations Corrected	# of Pending Corrections (as of 12/10/2010)
11	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2008 Bimonthly (**5.e**)	?	All	0
12	192.13(c) and 192.465(a)	Corrosion Control – Annuals (**6**)	1	1	0
13	192.13(c) and 192.465(a), Waiver 2	Corrosion Control – 2009 Rectifier Maintenance (**7**)	20	20	0
14	192.13(c) and 192.467(d)	Corrosion Control – Casings (**8**)	14	14	0
15	192.481	Atmospheric Corrosion	0	N/A	N/A
16	192.13(c) and 192.619	MAOP Records (**1.a-1.d**)	30	0	30
17	192.13(c), 192.739, 192.741	Regulator Stations (**1-14, 16**)	247	229	18
18	192.13(c) and	Regulator Stations (**15**)	?	All	0
19	192.13(c)	Relief Valve Calculations (**1-3**)	6	6	0
20	192.13(c), 192.745 and 192.747	Emergency Valves (**1-4, 6**)	358	358	0
21	192.13(c)	Emergency Valves (**5**)	?	0	All
22	192.13(c)	Instrument Calibrations – CGI's	72	72	0
23	192.13(c)	Instrument Calibrations – HFI's	70	70	0
24	192.13(c)	Instrument Calibrations – M&L	115	115	0
25	192.13(c)	Pressure Recorders, Gauges, Other	20	20	0
26	192.705	Pipeline Patrols	0	N/A	N/A
27	192.13(c) and 192.625	Odorization	N/A	N/A	N/A
28	192.605(a) and 192.615	Emergency Plan	1	1	0
29	192.13(c) and 192.615(a)(6)	Emergency Zones	1	1	0
30	192.13(c)	Joiner Qualifications	6	6	0
31	192.13(c)	Deactivation Records	93	0	93

A. Item 1, Leak Survey – Distribution, finding 4: Please provide in a spreadsheet each "Can't Get In" (CGI) address for all 96 of the missing/incomplete CGI logs and the date that each CGI was leak surveyed, or if not complete, the scheduled date of the leak survey. Also, please explain in detail Mission Division's current process for administering CGI conditions.

B. Item 2, Leak Survey – Distribution, finding 7: Please verify that all CGIs on each of the 73 plat maps were logged and have been or are scheduled for leak survey.

C. Item 4, Leak Repair, findings I.1, I.2 and I.3: Please provide the "A" form for each of the six new sections of pipe that were not pressure tested. Please identify the Operating Pressure, MAOP, SMYS and the hoop stress as a percent of SMYS for each of these sections. Also, please verify when each of the sections will be pressure tested. If already tested, please provide the details of the testing.
D. Item 4, Leak Repair, finding I.5: Please provide documentation verifying the manufacturing date and date the pipe was installed. If PG&E is unable to verify the manufacturing date, please indicate when PG&E will replace these sections of pipe with pipe that meets PG&E's standards (e.g., PE 2406/2708 pipe no more than three years old).
E. Item 9, Corrosion Control – Calibrations, finding 4: Please verify that a tailboard of calibration frequencies has been conducted with the applicable employees and the date that the tailboard was conducted.
F. Item 14, Corrosion Control – Casings: Please verify that all 14 casings have had their potential measurements taken, and the date they were taken. Also, please provide the casing-to-soil and pipe-to-soil measurements for all 14 locations.
G. Item 16, MAOP Records 1.a-1.d: Please provide each of the four records for each of the 30 MAOP areas identified.
H. Item 17, Regulator Stations, finding 7: Please advise us of the progress to replace valves not rated for the inlet MAOP at the 16 regulator stations. For any regulator stations that still need to have components replaced, please provide an estimated date of completion.

B. CPUC Audit Findings/Violations

1. Title 49 CFR §192.603(b) states:
"Each operator shall keep records necessary to administer the procedures established under §192.605"

and

Title 49 CFR §192.703(c) states:
"Hazardous leaks must be repaired promptly."

While reviewing "A" forms for grade one leaks, we found incomplete information about leak 08-22086-1; we were uncertain if the leak had been repaired, and PG&E could not provide supporting documentation verifying this. Although PG&E subsequently went to the location of the leak, surveyed the area and found surface evidence that the leak had, in fact, been repaired, PG&E is still in violation of Title 49 CFR §192.603(b).

2. Title 49 CFR §192.465(a) states:
"Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463..."

PG&E indicated during the audit that an effort was made in 2010 to identify all "annual" monitoring points. Please identify how many annual monitoring points were identified during this effort, and were not monitored in 2008 and/or 2009 as required by the above code section.

Also, how many of these identified isolated steel sections had no cathodic protection installed prior to identification in 2010?

3. Title 49 CFR §192.13(c) states:

   "Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part."

And

Title 49 CFR §192.603(b) states:

"Each operator shall keep records necessary to administer the procedures established under §192.605"

PG&E's Standard O-16 states that resurveys of Cathodic Protection Areas (CPA) shall be conducted once every six years. We found several CPAs that did not have complete resurvey records for certain time intervals, and are therefore in violation of Title 49 CFR §192.603(b). Those areas include: M10-3 (no records of a survey between 1999 and 2009), M12-1 (incomplete records for the 2007 resurvey), M12-4 (the 2006 resurvey map was missing) and M12-9 (the 2006 resurvey was missed).

4. Title 49 CFR §192.723 states in part:

   "(a) Each operator of a distribution system shall conduct periodic leakage surveys in accordance with this section.

   (b) The type and scope of the leakage control program must be determined by the nature of the operations and the local conditions, but it must meet the following minimum requirements:

   (1) A leakage survey with leak detector equipment must be conducted in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year.

   (2) A leakage survey with leak detector equipment must be conducted outside business districts as frequently as necessary, but at least once every 5 calendar years at intervals not exceeding 63 months..."

During our review of leak survey maps, we noted the following highlighting issues. These are violations of the indicated code sections, since the highlighting identifies facilities that have been leak surveyed.

Map #	Code Section Violated	Comments
19C-9	192.723(b)(2)	A small segment of pipe on Linda was highlighted in 2004 but not 2009.
20B-12	192.723(b)(2)	A service between Copeland and St. Leonard's St. was apparently not checked in 2009.
25A-14	192.723(b)(1)	A segment was highlighted in 2007 and 2009 but not 2008.
28D-12	192.723(b)(1)	A segment was highlighted in 2007 and 2009 but not 2008.
16B-11	192.723(b)(2)	In 2009, services on Andora Lane were not ticked (bottom right of map).
12A-5	192.723(b)(1)	A service was highlighted on the 2007 and 2009 maps, but a different service was highlighted on the 2008 map.
12B-1	192.723(b)(1)	A surveyor highlighted a new service in 2007, and marked it "NEW – TOT'S LEARNING CENTER." The service was not leak surveyed in subsequent years.
12D-09	192.723(b)(1)	One service was not highlighted in 2008.
12F-12	192.723(b)(1)	A service was not highlighted in the 2009 survey.

While reviewing leak survey maps, we also found the following CGI surveys exceeded the required time interval in Title 49 CFR §192.723(b)(2).

Map #	Comments
16C-12	The last survey was completed on 6-4-04. Two 2009 CGI's were completed on 1-29-10.
16C-14	The last survey completed on 6-9-04. The 2009 CGI's completed in 2010.
16D-15	The last survey completed on 6-16-04. The 2009 CGI's completed in 2010.
16E-15	The last survey completed on 6-16-04. The 2009 CGI's were completed in 2010.
17A-16	The last survey was completed on 6-04-04. A 2009 CGI was done 1-14-10.
29F-8	The last survey was completed on 4-29-04. Four 2009 CGI's were done 1-13-10.
30A-7	The last survey was completed on 5-79-04. Three 2009 CGI's were done 9-20-10.
30B-5	The last survey was completed on 4-27-04. A 2009 CGI was done on 9-20-10.
30B-6	The last survey was completed on 4-15-04. Five 2009 CGI's were done 2-3-10.

C. Field Review

While field verifying cathodic protection at different locations, we found one short section of apparently isolated steel on map M12-37. The location is at the intersection of "D" Street and Foothill Blvd. in Hayward. The color coding on the map indicates an isolated section of steel. We attempted to verify adequate cathodic protection. However, the results were inconclusive. Please verify that this section has adequate cathodic protection or is no longer steel pipe.